Two photon metrology - Getting Down to business

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The advent of two-photon light sources has been one of the most exciting developments in recent times with applications ranging from metrology to quantum computation, communication, and cryptography. The metrology area is itself quite wide ranging from detector standards to source standards, and even materials properties measurements. While many of these applications have been proposed, and feasibilities demonstrated, and some cases these applications have even become workhorses, turning these techniques into true metrology is still very much a work in progress. Interestingly, the work to develop the metrology applications dovetails nicely with the work needed to develop the more utilitarian applications. We present some history and some of the current status of the field.